



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

mf

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,437	02/10/2004	Yong Cheol Park	0465-1141P	1710

2292 7590 02/15/2007
BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

PATEL, GAUTAM

ART UNIT PAPER NUMBER

2627

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	02/15/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/15/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/774,437

Applicant(s)

PARK, YONG CHEOL

Examiner

Gautam R. Patel

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 41-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 41-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment/Arguments:

1. This is in response to amendment filed on 12/20/06.
2. Claims 41-50 remain for examination. NO NEW Claims are presented for examination.
- 3.

IMPORTANT NOTES

4. It is assumed that claim 49 is incorrectly marked as "NEW", since claim 49 was already present in the application and only limitation (c) seems to be added to it. Correction of this and explanation is required if there is any further action by the Applicant.

Claim Rejections - 35 U.S.C. § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 41-50 are rejected under 35 U.S.C. § 102(b) as being anticipated by AAPA
"Applicant's Admitted Prior Art" (hereafter AAPA).

As to claim 41, AAPA discloses the invention as claimed [see Figs. 1-5] including formatting the optical recording medium, and resetting a location information, comprising the steps of:

(a) formatting the optical recording medium in response to the formatting request at least to use the second spare area as a user data area after formatting; and,

(b) resetting a location information of the second spare area to indicate a changed size of the second spare area after formatting,

wherein the step (a) of formatting the optical recording medium includes creating a new defect list [see fig. 5] of the defect management area to replace an old defect list [paragraphs 16-19], and

wherein the second spare area has a variable size [fig. 4 (b)] and a start position of the second spare area is varied [fig. 4 (b) area marked “extention” extension?], depending upon the variance of the size of the second spare area, while an end position of the second spare area is fixed and is located close to a lead-out area [fig. 4 (b) bottom part of SSA] of the recording medium [Specification paragraphs 3-19].

6. The aforementioned claim 42, recites the following steps, inter alia, disclosed in AAPA:
(c) determining if the second spare area has been assigned prior to said formatting step (a) and said resetting step (b), wherein said steps (a) and (b) are performed if the second spare area has been assigned [Specification paragraphs 3-19].
7. The aforementioned claim 43, recites the following steps, inter alia, disclosed in AAPA:
(a1) registering sectors judged to have defects into the new defect list, if the optical recording medium is to be formatted with certification [Specification paragraphs 3-19].
8. The aforementioned claim 44, recites the following steps, inter alia, disclosed in AAPA:
(a2) disposing an old defect list that existed prior to said formatting step (a), if the optical recording medium is to be formatted with certification [Specification paragraphs 3-19].
9. The aforementioned claim 45, recites the following steps, inter alia, disclosed in AAPA:
(a1) registering all sectors previously judged in an old defect list into the new defect list if the optical recording medium is to be formatted without certification [Specification paragraphs 3-19].
10. The aforementioned claim 46, recites the following steps, inter alia, disclosed in AAPA:
(c) storing the location information of the second spare area in the defect management area of the optical recording medium [Specification paragraphs 3-19].
11. The aforementioned claim 47, recites the following steps, inter alia, disclosed in AAPA:

the location information of the second spare area includes the start position of the second spare area on the optical recording medium [Specification paragraphs 3-19].

12. The aforementioned claim 48, recites the following steps, inter alia, disclosed in AAPA:
(b1) resetting the start position [fig. 4(b), area marked “extention”] of the location information [Specification paragraphs 3-19].

13. The aforementioned claim 49, recites the following steps, inter alia, disclosed in AAPA:
(a) checking if a command for formatting of the optical recording medium is received;
and

(b) changing the second spare area to a user area to be written, if the command is received, while resetting the second information to indicate a changed size of the second spare area after formatting; and

(c) creating a new defect list of the defect management area to replace an old defect list, wherein the second information includes start and end addresses of the second spare area, and the end address is fixed and is located close to a lead-out area [fig. 4 (b) bottom part of SSA] of the recording medium, while the start address is varied, upon the variance of the size of the second spare area [Specification paragraphs 3-19].

14. The aforementioned claim 50, recites the following steps, inter alia, disclosed in AAPA:
a first spare area and a second spare area for replacing a defective area with an available replacement area; and

a defect management area including a defect management information for managing a defective area, the defect management information including a first information to indicate the defective area found at least after formatting, the first information further including a second information to indicate a location of the second spare area,

wherein the second spare area can be changed to a usable user area when formatting, while the second information is reset to indicate a changed size of the second spare area after formatting, and wherein the second spare area has a variable size and a start position [fig. 4(b), area marked “extention”] of the second spare area is varied, depending upon the variance of the

Art Unit: 2627

size of the second spare area, while an end position of the second spare area is fixed and is located close to a lead-out area [fig. 4 (b) bottom part of SSA] of the recording medium, and wherein a new defect list of the defect management area is created to replace an old defect list when formatting [Specification paragraphs 3-19].

15. Applicant's arguments filed on 12/20/06 have been fully considered but they are not deemed to be persuasive for the following reasons.

In the REMARKS, the Applicant argues as follows:

A) That: "According to the Examiner's logic, because the related art discloses changing the location information of the Supplementary Spare Area, the related art performs formatting as recited in the independent claims.

Applicant respectfully disagrees. First, it is improper for the Examiner to assume that the related art is valid prior art.

Second, the situation that is depicted in Figure 4 of the present disclosure is merely an operation that occurs during normal reading and/or writing data from/to the optical disk. One of ordinary skill would clearly understand the difference between formatting as normal used in the art as opposed to the situation depicted in figure 4. In other words, the Examiner's interpretation is unreasonably broad" [page 7-8, paragraph 4, 2; REMARKS].

FIRST: Unless a written PROOF is given that "related art" is NOT a valid prior art, it will always be interpreted as prior art by this Examiner in particular and this office in general.

SECOND: As to the Examiners' interpretation to be unreasonably broad, the examiner has looked at the interpretation and found it to be quite normal and very reasonable. Any type of changing of nay area is called formatting that particular area or the disc, hence interpretation is normal and common.

ALTERNATE REJECTION

Claim Rejections - 35 U.S.C. § 102

16. Claims 41-50 are rejected under 35 U.S.C. § 102(b) as being anticipated by Ito, US patent 5,715,221 (hereafter Ito).

As to claim 41, Ito discloses the invention as claimed [see Figs. 1-5] including formatting the optical recording medium, and resetting a location information, comprising the steps of:

(a) formatting the optical recording medium in response to the formatting request at least to use the second spare area as a user data area after formatting; and,

(b) resetting a location information of the second spare area to indicate a changed size of the second spare area after formatting, wherein the step (a) of formatting the optical recording medium includes creating a new defect list of the defect management area to replace an old defect list, and

wherein the second spare area has a variable size and a start position of the second spare area is varied, depending upon the variance of the size of the second spare area, while an end position of the second spare area is fixed and is located close to a lead-out area of the recording medium [col. 6, lines 21-55; col. 10, line 23 to col. 11, line 46].

17. The aforementioned claim 42, recites the following steps, inter alia, disclosed in Ito:

(c) determining if the second spare area has been assigned prior to said formatting step (a) and said resetting step (b), wherein said steps (a) and (b) are performed if the second spare area has been assigned [col. 6, lines 21-55; col. 10, line 23 to col. 11, line 46].

18. The aforementioned claim 43, recites the following steps, inter alia, disclosed in Ito:

(a1) registering sectors judged to have defects into a new defect list, if the optical recording medium is to be formatted with certification [col. 6, lines 21-55; col. 10, line 23 to col. 11, line 46].

19. The aforementioned claim 44, recites the following steps, inter alia, disclosed in Ito:

(a2) disposing an old defect list that existed prior to said formatting step (a), if the

optical recording medium is to be formatted with certification [col. 6, lines 21-55; col. 10, line 23 to col. 11, line 46].

20. The aforementioned claim 45, recites the following steps, inter alia, disclosed in Ito:

(a1) registering all sectors previously judged in an old defect list into the new defect list if the optical recording medium is to be formatted without certification [col. 6, lines 21-55; col. 10, line 23 to col. 11, line 46].

21. The aforementioned claim 46, recites the following steps, inter alia, disclosed in Ito:

(c) storing the location information of the second spare area in the defect management area of the optical recording medium [col. 6, lines 21-55; col. 10, line 23 to col. 11, line 46].

22. The aforementioned claim 47, recites the following steps, inter alia, disclosed in Ito:

the location information of the second spare area includes the start position of the second spare area on the optical recording medium [col. 6, lines 21-55; col. 10, line 23 to col. 11, line 46].

23. The aforementioned claim 48, recites the following steps, inter alia, disclosed in Ito:

(b1) resetting the start position of the location information [col. 6, lines 21-55; col. 10, line 23 to col. 11, line 46].

24. The aforementioned claim 49, recites the following steps, inter alia, disclosed in Ito:

(a) checking if a command for formatting of the optical recording medium is received;
and

(b) changing the second spare area to a user area to be written, if the command is received, while resetting the second information to indicate a changed size of the second spare area after formatting; and

(c) creating a new defect list of the defect management area to replace an old defect list, wherein the second information includes start and end addresses of the

Art Unit: 2627

second spare area, and the end address is fixed and is located close to a lead-out area of the recording medium, while the start address is varied, upon the variance of the size of the second spare area [col. 6, lines 21-55; col. 10, line 23 to col. 11, line 46].

25. The aforementioned claim 50, recites the following steps, inter alia, disclosed in Ito:
a first spare area and a second spare area for replacing a defective area with an available replacement area; and

a defect management area including a defect management information for managing a defective area, the defect management information including a first information to indicate the defective area found at least after formatting, the first information further including a second information to indicate a location of the second spare area,

wherein the second spare area can be changed to a usable user area when formatting, while the second information is reset to indicate a changed size of the second spare area after formatting, and wherein the second spare area has a variable size and a start position of the second spare area is varied, depending upon the variance of the size of the second spare area, while an end position of the second spare area is fixed and is located close to a lead-out area of the recording medium, and

wherein a new defect list of the defect management area is created to replace an old defect list when formatting [col. 6, lines 21-55; col. 10, line 23 to col. 11, line 46].

26. Applicant's arguments with respect to above claims have been considered but are moot in view of the new grounds of rejection.

27. Applicant's amendment necessitated the new grounds of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

Art Unit: 2627

will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Contact information

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2600) where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dwayne Bost, who can be reached on (571) 272-7023.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.



**GAUTAM R. PATEL
PRIMARY EXAMINER**

Gautam R. Patel
Primary Examiner
Group Art Unit 2627

February 10, 2007